

The invention claimed is:

1. A spindle motor for hard disk drives having a hydrodynamic bearing arrangement comprising:
 - a shaft;
 - a thrust element mounted on a central portion of said shaft;
 - a bearing sleeve, further comprising an upper sleeve part, a lower sleeve part and a spacer, said upper sleeve part being axially separated from said lower sleeve part by said spacer; and
 - an annular cavity formed by said upper sleeve part, said lower sleeve part and said spacer,wherein said upper sleeve part, said lower sleeve part and said spacer encompass said shaft such that said thrust plate is accommodated within said annular cavity.
2. The spindle motor according to Claim 1 further comprising a first hydrodynamic radial bearing formed between said upper sleeve part and said shaft and a second hydrodynamic radial bearing formed between said lower sleeve part and said shaft.
3. The spindle motor according Claim 1 further comprising a plurality of recesses formed on an inner diameter of said thrust plate.
4. The spindle motor according Claim 1, wherein outer diameters of said upper and lower sleeve parts are of the same size.
5. The spindle motor according to Claim 1, wherein said shaft is radially constricted in the area of an upper opening of the upper sleeve part and in the area of a lower opening of the lower sleeve part such that a lubricant reservoir is created between the upper and lower sleeve parts and the shaft.

6. The spindle motor according to Claim 1, said shaft is radially constricted in the area of an upper opening of the upper sleeve part such that a lubricant reservoir is created between the upper sleeve part and the shaft.
7. The spindle motor according to Claim 1, said shaft is radially constricted in the area of a lower opening of the lower sleeve part such that a lubricant reservoir is created between the lower sleeve part and the shaft.
8. The spindle motor according to Claim 1, wherein the shaft is fixedly accommodated in a baseplate and wherein said upper and lower sleeve parts rotate around the shaft supporting the rotor.
9. The spindle motor according to Claim 1, wherein said upper sleeve part, said lower sleeve part and said spacer are fixedly mounted within a supporting sleeve.